

Document Reviewed—20130506 RM 10 9 Final Design.docx

No.	General Comment		
1	The Final Design Report, associated figures, appendices, and attachments should all be updated to reflect the		
	changes in offsets and conditions as specified by Jersey City Municipal Utilities Authority (JCMUA) in May 2,		
	2013 letter. Note that additional modifications to the offsets may be made depending on the results of the		
	subsurface survey being conducted.		
	Response: The Final Design Report, associated figures, appendices and attachments have been updated to reflect the changes in the offsets from the JCMUA water lines.		

No.	Worksheet No./ Page No.	Specific Comments
1	Page 2-3, 3 rd Paragraph	The first sentence of this the 3 rd full paragraph on this page has a typo. Please remove the word "such."
		Response: The text has been revised accordingly.
2	Page 3-5, Section 3.7	The text states that the bridge openings will be coordinated to occur at night, while elsewhere in the text (Sections 4.3.1.3 and 4.3.5) the need to only mobilize barges +/- 1 hour around low tide is stated. Please clarify the intention to open bridges and time when barges will be in transit. Also, either here or elsewhere in the document, please state where barges will be staged while awaiting bridge openings.
		Response: As indicated in Section 3.7, the transport of dredged material will require the opening of a minimum of 5 bridges and these openings will be coordinated such that the potential impact to surface traffic is kept to a minimum. Sections 4.3.1.3 and 4.3.5 will be revised to be consistent with Section 3.7.
3		When and how will it be determined that additional dredging is needed due to sloughing? Please clarify and revise as necessary.
	Page 4-2, Section 4.2.3	Response: Sloughing could potentially occur along the perimeter of the dredge cut. However, day and weekly surveys will allow for the monitoring of the performance of the dredging operations. These interim surveys will allow for potential adjustments to the dredging operations prior to the completion of the removal activity. In addition, following the completion of dredging activities a final bathymetric survey will be conducted to determine if the surface meets the requirements of the technical specifications. Areas which do not meet these requirements will require additional dredging.
4	Page 4-3, Section 4.3.2	Will the dredge barge be spudded in all locations?
		Response: Yes. The text has been revised accordingly.
5		Consider adding placement of sand over the dredged area as a BMP.
	Page 4-8, Section 4.4.3	Response: The placement of sand over the dredged areas is not an effective BMP for resuspension control and as such will not be included. Both the placement and removal of sand prior to capping can potentially increase resuspension.



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6	Section 4.6	Please assure that this section and the stand alone WQMP are consistent in the final
		Response: The Final Design document has been revised to be consistent with the current version of the WQMP dated June 27, 2013.
7	Figure 4-1	The upper tolerance should be 3 inches for any single measurement (for consistency with specification tolerance) and be set to at or below plan elevation on an average basis for each dredge management unit. Please revise as necessary.
		Response: Figure 4-1 is illustrating the allowable vertical overdredge of the dredging operations (+/- 4 inches) in relation to the target elevation of 2 feet. This vertical tolerance which is specified in Technical Specification Section 31 23 24 (1.12B) takes into account both the positioning software and machine tolerances of the dredge.
		The 3 inch tolerance is related to the acceptance criteria for the final dredge surface. As indicated in Technical Specification 31 23 24 3.01 C.4 "The Subcontractor shall dredge the sediments to be at or lower than the lines and grades shown on the Contract Drawings based on post dredge elevations using high resolution bathymetric survey data. Any 10 foot by 10 foot grid within a completed dredge area having an average elevation 3 inches or more higher than the lines and grades shown on the Contract Drawings shall be re-dredged". Due to the shallow water depth associated with the RM 10.9 Removal Area, the pre and post dredge surfaces will be determined using single beam bathymetric survey data which will be collected on 50 foot transects (spacing) in accordance with the USACE Guidance. The survey data will be processed with editing software and exported to ascii xyz files for generation of contours and sounding plots. The surfaces generated for the pre and post-bathymetric surveys will then be compared to ensure no 10 ft by 10 ft area has an average elevation greater than 3 inches above the target elevation of 2 ft.
8		Why was effectiveness of sand/active layer section of the cap lowered from 250 years to 100 years? Please clarify.
	Page 7-1, Section 7.1	Response: Although the design criteria was finalized for a period of 100 years, the effectiveness of the cap remains greater than 250 years and even longer for the strongly adsorbing constituents including dioxin. Section 7.2.2.1 has been revised to indicate the effective life of the cap design.
9		Please provide written documentation of the information provided by Upal Ghosh.
	Page 7-3, Section 7.2.2.2	Response: See the attached SERDP report presenting the mercury partition coefficients that Dr. Ghosh recommended be used for the sediment cap modeling. More specifically, Dr. Ghosh directed CPG to the range of commercially available carbon (CAC) values in Table 5 (4 E +06 to 2 E +07). The conservative low end of the range (less sorptive) was used for the modeling effort.
10	Page 7-12, Section 7.12	Please add a reference to Appendix K here. In addition, clarify whether any aspects of the cap design were modified/included because of long-term monitoring needs.
		Response: The text has been revised to include a reference to Appendix K. No aspect of the cap design needed to be modified to accommodate the LTMMP's monitoring requirements.



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11	Appendix C and Cap Design	We are continuing to evaluate seepage meter results and cap design. Suggest CPG engage Dr. Reible to present sensitivity of model parameters relative to cap design and make recommendation to CPG on final design parameters.
		Response: Dr. Reible reviewed and discussed the modeling parameters used for the cap design and provided a written summary of his findings and approval which was forwarded to the USEPA on June 3, 2013 for their review. A copy of the memo has been included in Appendix C.
12	Appendix D, Drawing C-2	Additional sampling (3 replicates of composites from 9 stations +/- or approximately 9 discrete samples from 0-6 inch interval) is recommended to document chemical concentrations of new surface material of "no capping area" that will remain uncapped post-TCRA.
		Response: Sampling of the post dredge surface in the "no capping area" for 2,3,7,8 TCDD, Total PCB Congeners and mercury has been added as a requirement in the Final Design Report.
13	Appendix E, Sec 31 23 24, Part 3.01, C, 4	The average elevation for any 10 foot by 10 foot grid should be at or below the plan elevation. Any individual elevation measurement should be no greater than the stated 3-inch maximum tolerance. Please revise as necessary.
		Response: The AOC does not require the final dredge surface to be at or below 2 feet but rather indicates that "approximately 2 ft" of sediment is to be removed. Therefore the target elevation was set at 2 ft \pm inches.
		See response to Comment #7.
14	Appendix E	Revise based on outcome of WQMP and Cap Design comments.
		Response: The technical specifications have been revised to be consistent with the latest version of the WQMP and outcomes of the CAP Design comments.
15	Appendix I, Section 7	Change Order Request and Nonconformance Reports should be sent to USEPA within 1 business day of issuance.
		Response: Change Order Requests and Nonconformance Reports as they relate to the Final Design documents will be communicated to the USEPA's on-site representative(s) within 1 day of issuance. The CQCP has been revised accordingly.
16	Appendix I, Section 8	Any corrective measure plans should be sent to US EPA within 1 business day of issuance.
		Response: Corrective measure plans as they relate to the Final Design documents will be communicated to the USEPA's on-site representative(s) within 1 day of issuance. The CQCP has been revised accordingly.